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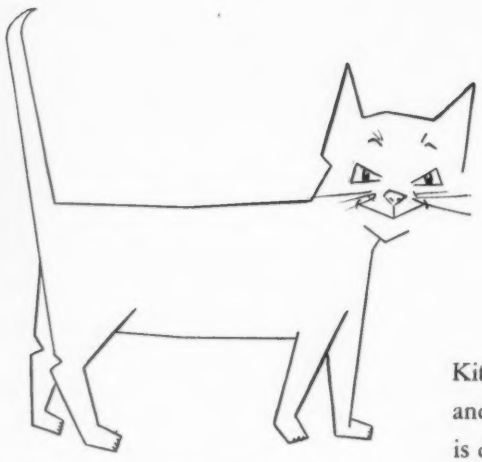

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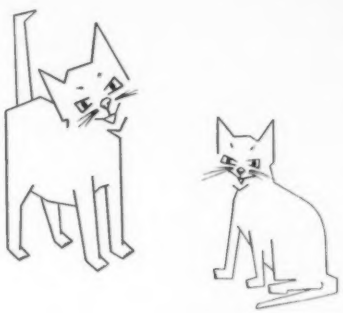

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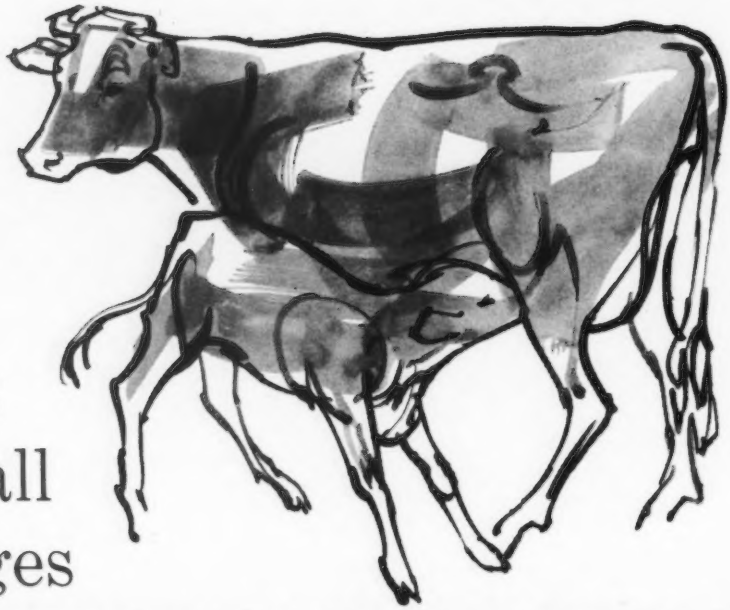

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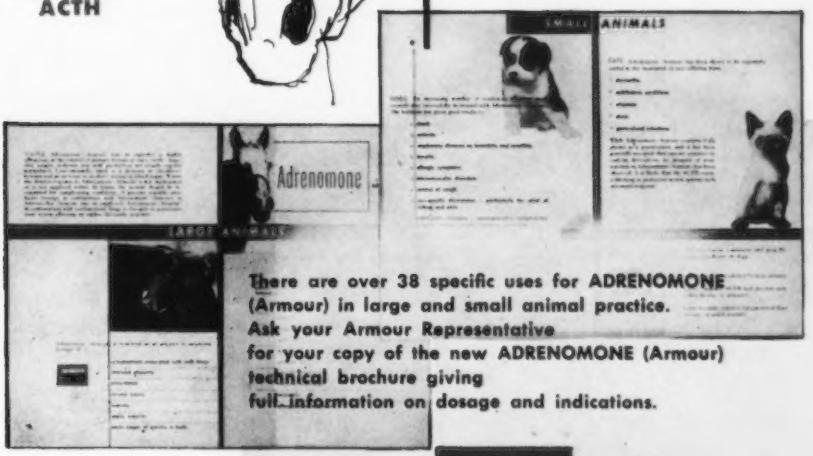

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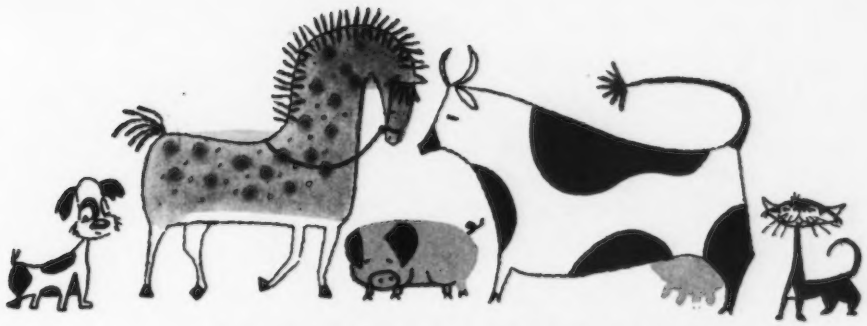

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Use of the Ischio-ilial ("DeVita") Pin in Canine Coxofemoral Luxation*

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Introduction

The importance of coxofemoral luxations in canine practice has been emphasized by numerous authors.[2,5,6,7,9,10]† Fixation to prevent reluxation during convalescence is often the major problem. The ischio-ilial pin introduced by DeVita[4], commonly referred to as the "DeVita pin," is a simple but effective fixation technique which offers the advantages of solid support, mobility of the joint, and ease of application. It has been used routinely for several years at the Angell Memorial Animal Hospital in Boston, Massachusetts.[1] Probably because of incomplete descriptions and inadequate publicity, the technique has not gained widespread recognition on the West Coast. Successful trials with the DeVita pin at the University of California indicate that it merits consideration as a practical method for fixation of recurrent or potentially recurrent coxofemoral luxations.

Technique

The ischio-ilial pin consists of a threaded intramedullary pin (3/32 or 1/8-inch diameter) which is inserted under the tuber ischii, passes dorso-lateral to and in intimate contact with the neck of the femur, and is screwed into the wing of the ilium (Figs. 1 and 2). It prevents dorsal or lateral displacement of the head of the femur, thereby preventing reluxation, and at the same time permits flexion and extension of the hip so that the patient can walk normally.

Following the induction of general anesthesia, the luxation is reduced. With the patient still lying on the uninjured side, a pad is placed between the stifles to support the limbs in their normal medio-lateral position. It is convenient to allow the hindlegs to assume their normal standing posture.

After standard preoperative skin preparation and draping, a short incision is made below the tuber ischii to minimize contamination of the pin. A sterile pin is inserted through the incision just ventral to the tuber ischii, at its lateral termination. A slight notch in the bone and cartilage at this point, easily palpated in all except the obese dog, constitutes a convenient landmark. The pin is directed toward the neck of the femur, being guided by simultaneous palpation of the greater trochanter by the opposite hand. After striking the femoral neck, the pin is withdrawn slightly and gently redirected until it slides past the femur in intimate contact with it. Care should be taken to avoid directing the pin too far medially, where the sciatic nerve lies. When properly directed, the pin passes lateral to all major vessels and nerves in the area. Should slight hemorrhage occur, it is easily arrested by digital pressure and redirection of the pin.

Insertion of the pin is continued until its point strikes the gluteal surface of the ilium, through which it is screwed. Occasionally there is a tendency for the pin to slide along the surface of the ilium instead of penetrating it. This is easily corrected by digital pressure over the area, forcing the tip of the pin medially. The pin should penetrate the ilium only far enough to seat its tip securely. No untoward effects were observed, however, when over-penetration occurred. Blakely[1] suggests that over-penetration can be avoided by using a pin in which the diameter of the threaded tip is less than the diameter of the pin itself. The shoulder forms an automatic "stop" when it reaches the bone.

The pin is severed just beneath the skin; and one or two skin sutures are placed to close the incision. The pin is left in place as long as the case demands. No damage has been observed from pins left in place for as long as six weeks. Radiographs may be employed to check placement of the pin before its protruding portion is severed. Both dorso-ventral and lateral x-ray views are necessary to visualize the location of the pin accurately. As skill in the technique is acquired, there is increased reliance on tactile sensations in the placement of the pin, and radiographic reassurance becomes a luxury.

In chronic luxations, the acetabulum often becomes obliterated by granulation tissue which prevents normal seating of the femoral head. Open reduction using the dorsal approach of Brown,[3] and acetabular curettage, are then necessary. If the DeVita pin is inserted before the incision is closed, it can be seen as it passes the femoral neck, and accurate placement is simplified.

Discussion

The hip joint is supported by the joint capsule, the round ligament, and the surrounding muscles of the hip. The extent to which these structures and the rim of the acetabulum are injured determines the ease with which a luxation may recur.

Many methods have been utilized to maintain reduction of coxofemoral luxations. The

*Presented at the CSVMA Midwinter Conference, January 23-25, 1956.

†See references at end of article.

object of all methods is to seat the head of the femur as securely as possible in the acetabulum, and to hold it there long enough for the damaged tissues to heal. In the normal standing position, the femoral neck extends from the acetabulum in a ventro-lateral, slightly posterior direction. The femoral head is seated best in the acetabulum when the neck is at right angles to the pelvis. Flexion, abduction and inward rotation at the hip help to achieve this position. The recognized bandaging techniques maintain one, two, or all three of these positions. They include the modified Ehmer sling[6] or figure-eight bandage, the Ehmer spread-cast[6] or its modification, the "butterfly bandage," Schroeder's pronating Thomas splint[9], and the technique recently publicized by Woolfe[12] in which the entire limb is drawn forward alongside the body. Most bandages and casts share several disadvantages: they are relatively uncomfortable, they invite pressure necrosis and decubital ulcers, they are not consistently effective, and immobilization of an injured joint predisposes to ankylosis.

Procedures such as the injection of irritants or direct trauma by a mallet, which hope to effect fixation by producing edema and inflammation around the joint, are reprehensible because they deliberately increase the tissue damage in an already injured area. They increase pain and delay healing. If they do not actually compound the injury, they may at least be condemned on the basis of their inhumanity.

The ideal technique for maintenance of reduction would be one which provides solid support, relieves tension and strain from the injured tissues, and permits normal use of the limb during convalescence, with a minimum of discomfort to the patient. Skeletal fixation most nearly satisfies these criteria. Several successful devices have been developed, notably the Olsen[8] and Stader[11] external pin assemblies, and the Knowles[7] artificial round ligament and toggle-pin device. Unfortunately, these procedures are not simple, and therefore fail to appeal to many veterinarians.

Figure 2. Lateral radiograph of DeVita pin in place. The protruding posterior portion of the pin has not yet been severed.

The ischio-ilial or "DeVita" pin provides the mechanical advantages of skeletal fixation and avoids the discomforts of bandaging, while requiring a minimum of equipment and special skills. The advantage of normal use of the limb in multiple injuries, such as concurrent fracture of the opposite femur, is readily apparent. The pin is concealed from view and needs no adjustment, facilitating convalescence at home without embarrassment or inconvenience to the client.

The hazard of damaging the sciatic nerve

appears to be more theoretical than actual. This nerve emerges over the acetabular branch of the ischium as a flat band. The DeVita pin passes near the nerve, usually lateral to it. Dissection studies have shown that although there is little space between the nerve and the pin, they lie in the same plane. Thus, the edge of the nerve is presented toward the pin, and there is little likelihood of penetrating it.

Perhaps the most common error in the insertion of the DeVita pin is starting the pin too far medially at the ischium. It then proceeds at a divergent angle, passes lateral to the ilium, and cannot be anchored there. On the occasion when this was done by the author, edema and inflammatory swelling of the limb

Figure 1. Dorso-ventral radiograph showing DeVita pin in place. The threaded tip of the pin penetrates the ilium farther than necessary.

appeared the following day. It apparently resulted from tissue damage created by several passages of the pin in correcting the error. Although alarming, the effect was transitory and subsided within 48 hours.

Because the coxofemoral joint capsule extends along the neck of the femur, a portion of it may lie in the path of the DeVita pin. The joint capsule suffers such extensive damage in recurrent luxations, however, that any additional trauma to it induced by the pin is insignificant. In recent luxations which show little or no tendency to redislocate upon manipulation, or in subluxations, this may not be true. Rather than risking increased damage in such cases by inserting the pin, a more conservative initial approach, such as a figure-eight bandage or mere cage rest, would appear desirable. Once reluxation occurs, it is the author's opinion that the DeVita pin is the procedure of choice for fixation.

Summary

An acute problem in the treatment of canine coxofemoral luxations is the maintenance of reduction. Fixation achieved by bandages or casts is uncomfortable and awkward. Skeletal fixation is effective, but most such methods are unnecessarily complex. The ischio-ilial ("DeVita") pin provides solid support, permits normal use of the limb during convalescence, causes no discomfort, and is easily inserted. It is a practical fixation technique which deserves more widespread recognition than it has apparently heretofore received.

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U.C. Men Appointed to Disease Council

Appointment of two University of California faculty members to the newly established National Advisory Allergy and Infectious Diseases Council was announced recently by Dr. Leonard A. Scheele, Surgeon General of the United States Public Health Service.

The two Californians are Dr. Karl F. Meyer, director of the Hooper Foundation at the University's Medical Center in San Francisco, and Dr. Charles E. Smith, dean of the School of Public Health on the Berkeley campus.

They will serve with eight other noted leaders in science, education, and public affairs. The council has been set up to facilitate activities of the new National Institute of Allergy and Infectious Diseases. That institute is one of the seven National Institutes of Health which comprise the principal research branch of the U. S. Public Health Service.

Importance of Disease Control to Livestock Production

C. D. VAN HOUWELING, D.V.M.*

The health of the livestock and poultry industries is an important indicator of the health of our entire agriculture, since for the last five years the farm value of these products has averaged about $19 billion per year. This is more than 57 per cent of the total farm value of all our agricultural products. As a comparison, the farm value of meat animals, milk, poultry, and eggs produced in our country in the last five years has been about four times the wholesale price received for all the automobiles manufactured during this period.

Some 95 million cattle were on United States farms and ranches last year. With United States population increasing at a rate of more than 7,000 persons a day, and with consumption of meat per person increasing year by year, it is estimated that by the early 1960's possibly 100 million cattle will be needed in this country.

The best opportunities of increasing our cattle population appear to be in improving the efficiency of livestock production. This includes better progress in combatting diseases, parasites, and insects that still tax livestock and poultry producers to the extent of 2.7 billion dollars a year. The loss due to these causes is greater than the farm cash value last year of any crop except corn. For instance, it is a half-billion dollars greater than the value of the entire wheat crop, and 2½ times the value of the oats crop. Livestock producers cannot afford to continue to take such losses if they are to operate on a profitable basis in the face of future requirements and the actual economics of the livestock industry.

Fortunately, large gains in disease control have been made in the past, and without these gains the livestock industry as we know it today would not be possible. Yet an average annual loss of 2.7 billion dollars to diseases and other hazards is too large, and must be cut down if our efficiency is to improve. And with modern transportation and marketing, which whisks livestock from one part of the country to the other and mingles them in widely separated market places, diseases today can spread faster and farther than ever before. The large number of livestock we must have today also magnifies the problems and greatly complicates disease control and eradication.

For these reasons, greater emphasis is being given to research on animal diseases. Research alone, however, is not enough. Disease control and eradication is the application of research. We also need to give due attention to proper use of our knowledge on ranches and farms. The present organization of the Agricultural Research Service, which separates livestock research and livestock regulatory activities in our organization chart, nevertheless places the two activities close together in practice. The organization therefore facilitates the prompt and effective application of research results

This teamwork between research and application of research has brought considerable progress. Take the cooperative State-Federal tuberculosis eradication program as an example. The incidence of bovine tuberculosis at present is just a little over one out of every 1,000 cattle tested. Every county in the 48 States has been a modified accredited area since November 1, 1940, when the last county was accredited. When the program started in 1917, one out of every 20 cattle tested in the United States proved to have tuberculosis. In those days work was slow and expensive. When research developed the intradermal method of testing it became possible to move more rapidly and surely against this disease. Since 1917, over 360 million cattle have been tested for tuberculosis in the United States. Of this number, more than 21 million were in California alone. Last year, with only 0.11 per cent infection, there are still roughly 103,000 animals in the United States infected.

Of the 7½ million cattle slaughtered in 1917 under Federal inspection, 40,000 carcasses were condemned. Of the 18½ million slaughtered under Federal inspection in 1954, only 441 carcasses were condemned. But if the percentage of infected animals had remained the same in 1954 as it was in 1917, almost 98,000 carcasses would have been condemned instead of 441. The reduction in condemnations and in the slaughter of reactors at the 1954 level of infection as compared to the 1916 level represents a saving of approximately $150 million a year, not taking into account the increased milk and meat production and the great contribution to human health. At this rate, livestock producers save enough every two years from this one source to pay back all the funds invested by both State and Federal governments in the entire tuberculosis eradication program from the time it started 37 years ago—a pretty good dividend rate on an investment!

While the incidence of tuberculosis is still high enough to be dangerous, it is low enough to be difficult to detect and stamp out. The situation calls for new techniques. One of our most effective techniques, instituted fairly recently, is to trace back animals that show tuberculous lesions during postmortem ex-

(Continued on page 31)

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Practical Hormone Therapy*

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Endocrine dysfunction is not an uncommon occurrence in cattle, particularly in heavy producing females that are well fed. The organs most profoundly affected are those of the reproductive system. In this discussion, diagnosis will be emphasized and a summary of treatments for the principal disorders outlined. It seems important also to point out that while the underlying etiology of endocrine pathology remains obscure, some disorders appear to be closely related to improper or inadequate nutrition, poor management and disease.

Considerable progress in hormone understanding and therapy in cattle has been made in recent years. Yet, it appears the surface has barely been scratched. Many questions remain unanswered. Advancement is bound to be slow since controlled experiments with cattle are expensive and for the most part involve long intervals of time. In the absence of sufficient controlled research, careful clinical observations must continue to be employed.

With this brief introduction, let us review some of the principal endocrine disturbances encountered in the field.

Anestrus

Anestrus is the absence of estrus. It constitutes an important phase of the sterility problem. The therapy employed must be determined largely by history and diagnosis ascertained through rectal palpation of the female. If the examination yields little or no pathology and reliable information is not at hand so that an accurate diagnosis can be made, it is usually more prudent to re-examine the animal at a future time rather than proceed on a guesswork basis.

Absence of heat ceases to be an immediate sterility problem when the female is found pregnant. This is not an uncommon cause of anestrus. Likewise, if the reproductive tract is normal and there is a corpus luteum (C L) on one of the ovaries and the female may have been bred less than 30 days, no treatment is indicated. The animal should be re-examined at a future date.

The occurrence of anestrus and the presence of a persistent or retained C L is sometimes difficult to explain in the non-pregnant female. Often it is associated with uterine pathology such as fetal absorption or abortion, pyometra, mumified fetus, macerated fetus and possibly an over-stimulated or infected cervix. Putting it another way, the retained C L may sometimes be regarded as the continuation of a once normal C L of pregnancy in which destruction of the embryo or fetus has taken place.

Absence of heat is sometimes observed in cows that nurse calves for several weeks or months after freshening. Retained corpora are sometimes present in the ovaries of these cows, in others they are absent.

Heat periods are frequently missed because no one has observed them. Sometimes symptoms of estrus are absent or nearly absent and these are usually referred to as silent periods. Unobserved heats and silent heats are a relatively common occurrence on many farms. Cycling and ovulation undoubtedly takes place in many of these quiesent heats.

Absence of estrus is sometimes seen in females with so-called inactive or static ovaries. These females apparently do not pass through the luteal or estrus cycles. From the standpoint of diagnosis, it would be very helpful and important if one could regularly differentiate these ovaries from active ones while in the early or late stages of regular or silent estrus. Generally the normal active ovaries have a lively resilient feel while the inactive ones are likely to be more firm and lifeless. The uterine horns generally reveal a deficiency of tone following a prolonged period of ovarian quiesence.

There are other factors that are directly or indirectly responsible for extended anestrus in females. They are prolonged inadequate food supply, over-feeding, insufficient mineral intake, vitamin or iodine deficiency, etc. Still other causes are chronic debilitating diseases, defective or incomplete ovarian development seen in some virgin heifers, the presence of luteal or follicular cysts, abscesses or tumors of the ovaries, and tumors or cysts of the pituitary gland. Freemartins are usually in a state of anestrus because ovaries are either absent or inactive.

Treatment of Anestrus

Estrogen therapy is sometimes indicated in certain conditions of anestrus, particularly if a C L is present, either as the principal or as supplementary treatment. Dosages of estrogens and the indication for their use vary with the type of product and the susceptibility of the animal. Dosages that are suitable for some animals will have little or no effect upon others. In a third group, the same dosage may stimulate the formation of follicular cysts.

Estrogens most frequently employed are Stilbestrol (deiethystilestrol), estradial cyclopentyltropionate (ECP) and Estradial Dipropionate (Diestro or Di-ovacylin). The recommended dosages for Stilbestrol are from 10-20 milligrams. For Repositol Stilbestrol,

*Presented at the CSVMA Midwinter Conference, January 23-25, 1956.

the dosage is 5-10 milligrams per 100 lbs. of body weight, not to exceed a total dose of 4 cc. Five milligrams of ECP is a satisfactory dosage for most large holstein and brown swiss cattle and possibly for some older individuals in other breeds. For young adults and heifers, particularly individuals of the smaller breeds, this dosage is generally too large. An intramuscular injection of 3½ to 4 milligrams is generally more satisfactory and safe.

When foreign material such as mucus and pus is present in the uterus, estrogen therapy is frequently indicated. Therapy for emptying the uterine horns and the need for administering supplementary treatment is based largely upon the amount and kind of material in the uterus and the presence or absence of systemic reaction.

When several quarts or more of fluid or debris is present in the uterus, an attempt should first be made to siphon off the excess material with a rubber or metal catheter. If only a small amount is present, such as a few ounces of pus, this preliminary evacuation process is not so necessary. However, removal with a return flow catheter and/or infusion of the uterus with suitable antibiotics or antiseptics is often good immediate procedure or as a follow up treatment in a week or two.

Enucleation of the corpus luteum is sometimes possible and if it can be easily removed, it constitutes an important part of the treatment. When the C L lies beyond the reach of the operator or when the removal is likely to cause injury to the delicate ovarian tissue, this approach is unsatisfactory and should not be pursued further.

When an estrogen is relied upon to evacuate the contents of the uterus, one large injection or a series of smaller ones usually produces a heat and expulsion of the uterine contents in two to ten days. The dosage is usually double the amount used for instigating heat symptoms. Following evacuation and contraction of the uterine horns, an infusion of the uterus is often indicated or if the cervical canal is sufficiently dilated, one or more suitable bolets, capsules or suppositories may be placed in the uterus and cervix to suppress or destroy bacterial activity.

Estrogens are frequently relied upon for evacuation of mumified fetus. The dosage is the same as for pyometra. Usually no other treatment is necessary except to postpone breeding for two regular heat periods.

Posterior pituitary products are frequently employed to shrink the uterus. For evacuating the uterine contents, these products are most effective when used within a few hours after calving or within twelve to twenty-four hours following estrogen therapy.

Other indications for posterior pituitary products are dystocia, due to uterine inertia, reduction of uterine prolapse, delivery of retained placenta, particularly when used in conjunction with an estrogen and for postoperative contraction of the uterus following a caesarian section. It is probably not necessary to point out that the administration of posterior pituitary products is not usually recommended in fetal dystocis unless the cervix is well dilated and other mechanical obstructions are absent.

The usual dosage is 5 to 10 cc administered subcutaneously or intramuscularly. For more prompt response, the oxytocic preparations may be injected intravenously, usually in 3 to 5 cc doses. Dosage directions are usually given by the manufacturer and it is advisable to follow them.*

In might be well to point out that when the cause of anestrus is inadequate or improper nutrition such as over-feeding, correction of the condition may have to be made before satisfactory response to anestrus treatment is obtained. Turning cows out on grass in the spring after a winter of poor roughage feeding or supplying needed nutrients, often results in the return to normal estrus.

Heats may be artificially induced by enucleation of the C L by estrogen or F.S.H. injections in females with marked deficiencies in certain trace minerals such as cobalt, manganese, iodine, vitamin A or E, etc., but conception is not likely to occur until the general health of the animal has improved. Except in areas where specific deficiencies exist, females on a reasonably good regime of feeding seldom seem to suffer from anestrus or infertility. When anestrus and infertility is a herd problem, consider the feeding program but be particularly suspicious of infections, especially venereal infections, disease or debility or poor management.

Practitioners called upon to examine and treat anestrus heifers occasionally encounter virgin females that exhibit sexual infertility. Such heifers are found in any breed but more often in purebred beef herds where the young animals are the result of close breeding. The entire reproductive tract including the ovaries and mammary glands in such heifers are generally under-developed. Time will not permit a discussion of possible treatments for these animals. For the most part, results have not been too satisfactory.

Cystic Ovaries

Ovarian follicles that fail to rupture following estrus are referred to as ovarian or follicular cysts. Usually they continue to enlarge and secrete estrogen into the circulation. The excess secretion of estrogen throws the normal reproductive cycle out of balance. Many, but not all cows exhibit nymphomania. The cause of cystic ovaries is not known. The condition is largely associated with heavy feeding and high milk production, particularly in

*When a C L is absent anestrus may be corrected by the use of a follicle stimulating hormone (F.S.H.). The usual dosage is 1,000 to 2,000 International units. Treatment must be repeated in four to six days in some cases.

cows on official test and whose breeding dates are postponed four or more months. There is also evidence that the occurrence of cystic ovaries may have hereditary origin.

Hormone treatment of cystic ovaries consists primarily of intramuscular or intravenous injections of gonadatrophins that are predominantly (L H) in character. Intramuscular injections of repositol progesterone in relatively large doses have been reported also to be effective. Cysts may or may not be removed manually Removal of the cysts appears to be a logical procedure because of the probable reduction in estrogen secretion in advance of leutenizing action. However, cysts should be crushed only if they collapse on relatively slight pressure. Rough manipulation or strong pressure may lead to injury of the healthy ovarian tissue. Not all cysts respond to hormone therapy. Some cystic females must be re-treated. A small number apparently recover spontaneously, particularly when the cysts are formed within sixty days following partuition.

Delayed Ovulation

The length of the heat period in a cow varies considerably. The estimated normal period is about fourteen hours. The average time of ovulation is reported to fall somewhere between twelve and fourteen hours following the termination of estrus.

Ovulation in some cows occurs much later than normal. This delay in follicular maturity is without doubt a cause of infertility in some shy breeders. Cows that ovulate late if bred too early often do not conceive. There appears to be a direct relationship between delayed or abnormal ovulation and a subnormal sex activity. It is very probable that the subnormal activity is the result of a deficiency of estrogen production.

Progress in the development of the follicle can be noted through repeated palpations. With experience, the veterinarian will have little difficulty in estimating the time of ovulation providing the examination is made during the latter part of estrus or in the early part of the post-estrus period. There is considerable diagnostic value in determining the time of ovulation. It permits presenting advice on time of service and the need for treatment. The normal ovaries at this time will usually reveal a follicle on one of them. The mature follicle is presented as a firm blister-like elevation varying in diameter from about ¼ to nearly ½ inch at the base.

As the time of ovulation approaches, the follicle becomes less firm. Following rupture of the follicle, a small pit may be detected in the ovary which may persist for a period of twelve to twenty-four hours. After that it is difficult to determine on which ovary ovulation has occurred.

There are a number of products available to veterinarians that are designed to stimulate earlier ovulation in late ovulating females. One of the first of such products to be developed was an estrogen known as Dienestrol. Its function is to supplement the deficient natural estrogen production of the female. By raising the estrogen level, it is postulated that the leutenizing hormone is released earlier and this in turn results in a more positive and earlier ripening of the follicle. Dienestrol is administered either subcutaneously or intramuscularly at the onset of heat and the animal bred twelve to twenty-four hours later. Suggested dosages are 5 to 10 milligrams. The treatment may be repeated at the next regular heat. The hormone appears to have practical application but extensive clinical appraisal of its effectiveness has not been reported

Gonadatrophic hormones which are chiefly follicle stimulating (F.S.H.) in action and purified F.S. hormones are used for this purpose also. It is believed F.S.H. naturally inaugurates the development of ovarian follicles as well as the production of estrogen. When the synthetic hormone is injected two to five days prior to the next anticipated heat or ovulation, earlier follicle maturation and leutenization may be expected to occur. This relatively new approach to the problem of correcting subnormal follicular development appears to have practical application. Further clinical evaluation, however, is necessary before definite conclusions of its effectiveness can be drawn.

A somewhat similar treatment consists of intramuscular injections of 10 to 20 fractional rat units of Vetrophin early in the heat period. In a controlled research project with this product, ovulation was advanced as much as 10.7 hours.

Another product that may prove practical in advancing ovulation in cattle is progesterone. The dose for heifers is 5 to 10 milligrams injected subcutaneously or intramuscularly at the beginning of estrus. The recommended dose for cows is 20 mg. We have been using the aqueous form in our practice. This hormone also requires further study.

Hormone Use in Normal, Difficult-to-Settle Cows

How about cows with normal reproductive organs that do not settle? Does hormone therapy have a place for such cows, particularly high producing females with normal ovulations? Specific therapy for such individuals cannot be recommended at the present time. When they are presented, it is important first of all, to determine their exact status. Consider the care and feeding and carefully check for the presence of pathology or mechanical defects of the entire genital tract. The potency and health of semen to which the animal is bred should also be investigated.

The possible usefulness of hormone therapy for these supposedly normal cows and heifers that do not readily conceive has not been

fully appraised. However, limited clinical use of hormones appears to have value. Therapy that has been employed and deserves further study is the use of 5 to 10 rat units of Vetrophin (Abbott) or 25 mg. of Pituitary Leutenizing Hormone (Armour) administered intravenously at time of breeding or 2,500 to 5,000 units of Chorionic Gonadatrophin injected intramuscularly four to eight days following service.

Thyroid pills, 3 to 5 grains daily, have been employed to supplement hormone therapy, particularly in sluggish well-conditioned females. The thyroid is usually given for a period of two weeks post-estrus. The thyroid therapy cannot be satisfactorily explained. Benefits, however, seem to be derived from its use.

It has long been recognized that the corpus luteum is vital to the continuance of early pregnancy. How about progesterone therapy in corpus luteum deficiency? Well, progesterone like estrogen is produced in the ovary, but the two hormones have entirely different biological roles and therefore interfere with each other in their activity. In most normal females, the follicle develops and estrogen is largely secreted after clinical regression of the corpus luteum.

Progesterone in the presence of small quantities of estrogen also produces a sensitization of the endometrium in preparation for the development of the maternal placenta. It appears probable that progesterone replacement therapy for maintaining pregnancy in apparently normal females has merit. Continued careful clinical evaluation will eventually permit more accurate appraisal of this form of treatment. Furthermore, minimum dosages and frequency of administration have not yet been accurately determined.

For the present, 50 milligrams of Repositol Progesterone per 100 pounds of body weight or 500 milligrams injected intramuscularly every seven to ten days for a period of five months may be considered a maximum course of treatment. It is feasible that ½ or even ¼ of the maximum dosage injected at seven to ten day intervals for one to four months is sufficient to prevent fetal death or abortion in some individuals.

Repositol progesterone therapy, furthermore, has been found useful in vaginal prolapse cases particularly when associated with cystic ovaries or cows with an abnormally high F.S.H. level.

It may also be employed as supplementary treatment to surgical operations such as suturing or pinning of the vulva or as primary therapy in early prolapse cases. Doses recommended in early cases range from ½ to 1 milligram per pound of body weight to 2 milligrams per pound in chronic cases.

Dr. Lou McBride, Pasadena, was a speaker at the Illinois VMA meeting recently in Chicago.

Unusual Location of a Foreign Body—A Case Report

R. B. BARSALEAU, D.V.M.

Practitioner, Visalia, Calif.

On November 29, 1955, an out-call was made to examine a mare whose owner reported "teeth trouble." The client complained that his mare had suddenly developed difficulty in chewing. A physical examination of the patient revealed a six-year-old chestnut of quarter horse breeding, 15.3 hands high and weight of approximately 1,000 lbs. On a large frame, this weight seemed inadequate and her general condition, at best, could be called unthrifty. Rectal temperature at this examination was 102 degrees. A slight swelling in the intermandibular area was noted and palpated with little evidence of pain from the patient. Examination of the mouth showed little abnormality with the exception of a small papillary prominence on the right bar of the ramus, directly over the vestigial canine of the lower jaw. This was believed to be a bruising of the bar over the rudimentary canine. Palpation indicated a marked degree of extrusion of this tooth from its cryptic beginnings in the jaw. The buccal border of the cheek teeth in the dorsal arcades were in need of "dressing" with a dental float but not severely so; consequently "teeth trouble" was ruled out. A solution of Tri-Sulfa (H-G) was administered I.V. and the owner requested to call if no improvement ensued.

On December 1st, the client called to say that the mare was unable to eat and the tongue was swelling. The mare was admitted to the hospital pens where the owner's observations were corroborated. In addition to his observations, the author noted that tension in the intermandibular area had increased. The mare's temperature at this time was normal. A slight nasal discharge of no viscosity was noted. Empiric treatment with Sodium iodide I.V. was given. This treatment was continued for three days with observable subsidence of the mandibular and lingual swelling. The patient began eating and was sent home on December 7th with instructions to the owner to observe her eating habits carefully.

On December 8th, 35 hours from hospital discharge, the mare was re-admitted with the tongue swollen and protruding from the mouth about four inches. Cortisone acetate, 1,500 Units, was given intramuscularly and the tongue returned to normal size within four hours—however, a recurrence of lingual swelling and protrusion was observed the following day. Constant efforts to eat failed, with diets of oat hay, rolled oats, alfalfa hay and bran mashes being offered. The patient could drink water and normal swallowing movements were observed. Saline-Dextrose 5% was fed the mare intravenously, as her weight loss had been rapid. Sodium cacodylate (20 cc.) was given intravenously. A fluctuating swelling at the base of the tongue was palpated, causing severe pain to the mare, evidenced by her striking at the examiner with the forefeet. Author still unable to determine the source of trouble.

Between December 9th and December 12th, swelling of the tongue and the intermandibular area fluctuated from hard to soft but the rectal temperature remained at 100 degrees. On the morning of December 13th, heat was felt over the swollen area with softening of the center. A sterile tap with a 16 gauge, three-inch needle into the area of "pointing" produced nothing. A decision to go deeper was made and the mare was prepared for surgery. Mag-Chloral (H-G) was given intravenously until a state of deep narcosis was reached. A dental speculum was placed in the mouth and the jaws forced open. Thorough examination of the oral cavity showed marked edematous swelling of the tongue and floor of the mouth. Two gelatinous masses were seen and palpated at the root of the tongue on its ventral face. There was no evidence of trauma in the mouth and throat.

The intermandibular swelling was incised with the incision penetrating the skin, mylohyoideus, anterior digastricus and the pterygoideus medialis muscles. A deep abscess was found under the latter and a thick, cheesy flocculent material was flushed out. In probing with the index finger along the abscess wall, the author felt a sharp stab. A cautious re-entry of the finger searched out a small straight darning needle, one and five-eighths inches long with a very shart point. The needle was *not* imbedded in the abscess wall. Removal of the needle followed by swabbing of the abscess wall with a seven per cent Tincture of Iodine solution was accomplished and a gauze wick, to enhance drainage, was left in the incision. Tetanus antitoxin, 3,500 Units and 10 cc. of a Penicillin-Dihydrostreptomycin combination was given.

The next day the patient was able to eat rolled oats and small amounts of alfalfa hay. In two days her masticatory movements were almost normal. No further treatment was necessary and she was discharged on a prescribed grain ration of three daily feedings. After six weeks the owner reported that the mare's recovery was uneventful with rapid return of condition.

This case is interesting for a number of reasons. In its initial phases the case presented several confounding syndromes. First, symptoms of distemper (strangles); followed by signs resembling those of a ligneous phlegmon. Concurrently, actinobacillary-like symptoms involving the tongue and adjacent structures tended to further confound the author.

Infectious Bovine Rhinotracheitis*

(Experimental Studies)

D. G. McKERCHER, D.V.M., Ph.D., and J. E. MOULTON, D.V.M., Ph.D.

School of Veterinary Medicine, University of California, Davis

Transmission Studies

Our early investigations showed that blood and spleen from infected field cases failed to produce the disease in susceptible calves. However, when nasal washings from field cases were inoculated intranasally in susceptible calves and adult cattle the disease was produced. This included nasal washings from beef and dairy cattle in the California and Colorado outbreaks. Treatment of these nasal washings with antibiotics which killed all the bacteria had no effect on the transmissability of the disease.

A typical response of calves to inoculation with treated nasal secretions shows a peak temperature of 105 to 106 degrees F. around the fourth day and then decline and recovery of the animal after 10 to 14 days. Hyperemia and nasal discharge was observed after two days, inappetence and respiratory distress around the third day, and fibrinonecrotic rhinitis and depression appeared at the peak of the febrile response.

Inoculation of calves with nasal washings from normal cattle and with stabilizing fluid without nasal secretions failed to produce the disease.

Immunological Studies

Experimental animals recovered from various field strains of the disease and subsequently inoculated with injections of homologous and heterologous nasal secretions failed to develop rhinotracheitis. Non-immune control calves developed the disease.

Pathologic Findings

The lesions in the experimental animals were almost entirely restricted to the nasal cavity and the nasopharynx.

The earliest lesion was acute catarrhal rhinitis with excess mucin secretion, emigration of neutrophiles through the mucosa, hyperemia and edema.

The next stage was necrosis of nasal mucosa and formation of fibrinous exudate in the eroded areas.

This was followed by more diffuse necrosis and extensive fibrinous exudate with neutrophile invasion. This formed a pseudomembrane.

Grossly during the most severe stages of rhinotracheitis the nasal mucosa and nasopharynx were covered by sheets of fibrin and fibrinopurulent exudate.

Summary

1. Transmission of infectious bovine rhinotracheitis to young and adult cattle has been accomplished with material obtained from California and Colorado outbreaks.

2. The etiological agent is a virus as shown by transmission with bacterial-free nasal washings. Viruses from the various outbreaks have been successfully grown on tissue culture by Dr. Stewart Madin.

3. Immunological studies indicate that the viruses from the different outbreaks are the same.

4. Immunological studies indicate that immunity results.

5. The agent is confined to the respiratory tract and is not present in blood or spleen.

6. Pathological studies show the infection limited to the nasal cavity and nasopharynx and the lesion manifests itself as an acute fibrinonecrotic rhinitis.

*Presented at the CSVMA Midwinter Conference, January 23-25, 1956.

Ad Lib Feeding of Dogs*

A novel application of feeding dogs at the Gaines Research Kennels was discussed. This involved the use of granular homogenized pellets to be dry fed ad libitum. The experimentation with this technique has been carried on from 1946 through the present date. Such points as segregation of ingredients and the incorporation of a completely balanced diet in each granule was stressed. The newer concept of nutrition suggests that each feeding should contain a completely balanced ration to obtain a maximum value from any food.

A total of 26 breeds of adult dogs have been fed this diet exclusively from periods ranging from six months to five years. Almost all of the individual dogs have been able to learn to regulate the amount of food required by them for their caloric needs. The self feeding technique was further carried through a generation testing program. At the present time, the Gaines Research Kennels have their fifth generation of Labrador Retrievers that have been fed the ad libitum method exclusively. The dog's method of eating changes radically from "wolfing the food down" to eating the individual granules in small quantities. It is believed that the abrasive action of the granules on the teeth partially eliminates tartar formation. The method is being extended to cover additional breeds.

*Synopsis of paper given by J. W. Bernotavicz, Ph.D., Director, Gaines Research Kennels, at the CSVMA Midwinter Conference, January 23-25, 1956.

Bureau of Livestock Disease Control

H. G. WIXOM, D.V.M.

Amended California Brucellosis Regulations

On January 2, 1956, two new regulations aimed at further controlling brucellosis of cattle went into effect. The first, Dairy Cattle Brucellosis Regulation 754.1, was amended on December 27, 1955, and now provides that before being moved cattle of dairy breeds over six months of age must have a negative blood test for brucellosis within thirty days prior to movement or have a tattoo in the ear indicating they have been officially vaccinated against brucellosis. Steers, bulls, cattle moved for immediate slaughter, and under certain conditions those moved to pasture, are exempt. Blood tests referred to in this regulation must be made by one of the following laboratories:

1. A laboratory of the State Department of Agriculture.
2. The University of California School of Veterinary Medicine.
3. An approved county livestock inspection laboratory. Blood samples must be taken by a licensed veterinarian.

This regulation places increased importance upon legible tattoos placed in the ears of dairy heifers at the time they are vaccinated against brucellosis.

Dairy cattle not bearing legible tattoos and not accompanied by a certificate of a negative blood test can be moved only for immediate slaughter. Veterinarians are reminded that diversion of such cattle by testing or vaccinating in sales yards or for dealers after they have once been moved, is not permitted. For this reason requests to blood test or vaccinate dairy cattle for brucellosis in sales yards or for dealers should be looked upon with caution.

Dairy Cattle Brucellosis Regulation 754.2, deals with the interstate movement of cattle and requires that before entering the state, cattle of dairy breeds over four months of age must be accompanied by evidence of official vaccination against brucellosis between the ages of four and 12 months or be accompanied by a negative blood test for brucellosis made within thirty days prior to date of entry.

Recently chorioptic scab has been diagnosed in several herds of purebred cattle in California. Evidence points to infestation following exposure in livestock shows and fairs. Veterinarians are urged to be on the lookout for this condition and to report suspected cases to the Bureau of Livestock Disease Control district offices at once.

Reports indicate that the more serious psoroptic scab exists in other states and continues to spread. Since many cattle particularly of beef breeds are imported to California from these states, possibility of introduction of this condition in spite of precautions taken exists.

Livestock Diseases Reported

H. G. WIXOM, D.V.M.

Tabulation of Diseases Reported to the State Bureau of Livestock Disease Control during the Period September to December, inclusive, 1955.

	Sept.-Dec. Incl. 1955		
	North	Central	South
Anaplasmosis	9	2	7
Anthrax		4	
Blackleg	6		2
Bluetongue of sheep		3	1
Bovine bacillary hemoglobinuria	15	1	
Chorioptic Scab, cattle		3	
Coccidiosis, sheep	1		
Contagious ecthyma, sheep		2	
Cysticercus bovis	2	1	4
Equine encephalomyelitis		4	
Foot rot, cattle	1		
sheep	1		
Hog cholera	1		
Infectious atrophic rhinitis	1	3	
Johnes' disease	1	3	
Leptospirosis, cattle	10	71	11
swine	1	1	
horses		1	
Listeriosis, cattle			5
Malignant edema	4	2	1
Necrotic rhino-tracheitis		7	3
Paratyphoid, cattle		2	1
swine		1	
Sporadic bovine encephalomyelitis		1	
Swine erysipelas	1	3	3
Vesicular exanthema		1	
Vibrio fetus, cattle		3	

Louis A. Merillat—1868-1956

Dr. Louis A. Merillat, internationally known veterinary surgeon, teacher, journalist, and militant leader of his profession, died at his home in Chicago February 25, 1956, at the age of 87.

His career included an active role in the Army Veterinary Corps in World War I, particularly with the A.E.F. in France. In 1918 he was made Chief Veterinarian of the First Army, and so served until early in 1919.

Surviving are two granddaughters, both of Chicago: Mrs. Christopher Choporis who, with her husband and son, had lived with and cared for Dr. Merillat in recent years, and Miss Ethelwynne Merillat.

Plans Discussed for Annual Convention

Seated: Dr. Reginald A. Stocking, Dr. Fred B. Walker, Jr., Mrs. Philip C. Olson, Mrs. Reginald A. Stocking, Dr. A. Mack Scott and Dr. W. W. Putney. Standing: Don Mahan, Dr. Ralph Vierheller, Dr. Philip C. Olson, Charles S. Travers and Herb Warren.

On March 7th, your Executive Secretary and his assistant held a meeting in the Statler Hotel, Los Angeles, with a delegation from the Southern California VMA, at which plans for the Annual Convention, June 11-13, were discussed in detail.

Attending were: Mrs. Reginald A. Stocking and Mrs. Philip C. Olson, of the Women's Auxiliary; Drs. A. Mack Scott, Fred B. Walker, Jr., Philip C. Olson, Ben Dean, H. E. Burroughs, Ralph Vierheller, Reginald A. Stocking, W. W. Putney and Don Mahan, Charles S. Travers and Herb Warren.

The Statler's ample facilities will allow sessions, Women's Auxiliary meetings, luncheons, the President's banquet and dance and exhibitors' hall all conveniently located.

The local Arrangements Committee, headed by Dr. Ralph Vierheller, and consisting of Drs. H. E. Burroughs, Fred H. Meisinger, Darr Jobe and Samuel Hodesson, promises a never-to-be-forgotten meeting in June, and already sub-committees are hard at work planning all details.

Mrs. Reginald Stocking, women's chairman, announces a gala Fashion Show in one of the hotel's large halls.

"The SCVMA, hosts for the June convention," said Charles S. Travers, "are enthusiastically completing their plans for what appears to be the largest and finest of all our annual meetings."

Executive Secretary to Speak Before Davis Seniors

Charles S. Travers has been invited by Dean Donald E. Jasper to discuss the CSVMA with the senior class at Davis on Tuesday, May 22.

This will be the fifth consecutive year that your executive secretary has had the opportunity of speaking to the graduating students at the School of Veterinary Medicine. At each meeting, Secretary Travers has been successful in signing up practically the entire class as members of the Association.

Dr. Arburua Up for Re-election

Dr. Joseph M. Arburua has been sponsored by the CSVMA for re-election as delegate to the Executive Board, representing the Sixth District AVMA. When you receive your ballot, mark it for Dr. Arburua.

Ballots will probably be in your hands by the time you receive this issue of the JOURNAL. In order to insure California representation to the AVMA, it is necessary to unite on one candidate—the candidate sponsored by your State Association.

Outstanding Speakers Scheduled for June Convention

Dr. Reginald A. Stocking, member of the Program Committee for the 68th annual Convention, June 11-13, announces a partial list of speakers, as follows:

Dr. George Ott, Fromm Laboratories, who will speak on "Prophylactic Puzzles: Viruses"; Dr. Gordon Stocking, Kalamazoo, Michigan, "Adrenal Steroids in Small Animal Practice," and "Anthelmintic Use of Peperazine Compounds."

Dr. George Edds, formerly with Texas A. and M. College, will give papers on both small and large animals.

Patio and Pool, Hotel Statler.

Dr. C. R. Schroeder of the San Diego Zoo will talk on Zoo Animals and their Health.

Dr. Fred J. Kingma, formerly of Ohio State and now with Abbott Company, will give two talks. Mr. Floyd Heffron, secretary, Board of Pharmacy, will speak on "Dangerous Drugs of the Medical Profession."

Mr. Arthur Carr, Los Angeles, just returned from a two months' economic tour of the Orient, will speak on "Present Day Investments."

Dr. Stocking also urges attendance at the Question and Answer Luncheon, Tuesday, June 12. It will be one of the highlights of the meeting.

Both Drs. Walker and Stocking state that the meetings will be run *on time*.

Dr. Charles Ozanian, Bellflower, recently picked up a "shocking pink" Cadillac in Detroit. He drove it, accompanied by Mrs. Ozanian, to Atlantic City, where he attended a National School Board meeting. From there, they drove to Miami, New Orleans and home.

Women's Auxiliary Events Planned

The Southern California Veterinary Medical Association Women's Auxiliary would like to extend a cordial invitation to veterinarians' wives to attend the State Association Meeting, June 10 to 13 at the Statler Hotel, Los Angeles.

A complete program is being planned for your entertainment. Sunday evening a cocktail party is being arranged by the Southern California Veterinary Medical Association. There will be a golf tournament for the ladies to be held at the same time the men hold theirs. A trip to the famous Farmer's Market with shopping time as well as an opportunity to eat lunch of your own choice prepared by very fine chefs.

The ladies' luncheon with a fashion show is being arranged for your pleasure by Louise Bockman with a background of music by Hal Sandack's famous trio. Our annual business meeting will follow the fashion show.

There will be available time for television studio tours as well as some tickets for live shows, also visiting and shopping time.

Mrs. Reginald A. Stocking and her committee are in charge of local arrangements. We are looking forward to seeing YOU!

Midwinter Conference Comments

Brig. Gen. Wayne O. Kester: "I did enjoy your meeting very much, and I thought you did an exceptionally fine job of organizing and handling it. I learned a lot, met and visited with a lot of fine people, and felt that it was a real privilege to be there . . ."

Dr. J. W. Harrison, Executive Committee: "From all that I have heard about the last meeting you should be justly proud of the program and the way it went off. Every one seems to think it one of the best we have had for some time . . ."

Dr. I. Erickson, president-elect, Washington State VMA: "It was a real privilege to visit with you and to gain knowledge of the successful organizational methods of the CSVMA. Your very fine cooperation is most sincerely appreciated. The business-like veterinary organization in your state is a real tribute to all who have contributed to its cause. We recognize that the Washington State VMA can gain much from your experiences, and we are looking forward to comments and suggestions from you and the California Association officers . . ."

Examination June 7, 8 and 9

The Board of Examiners in Veterinary Medicine will hold an examination for the licensing of qualified veterinarians June 7, 8 and 9, at the School of Veterinary Medicine, University of California, Davis.

LOCAL ASSOCIATION NEWS

The Bay Counties VMA met Tuesday evening, March 13, at the Alta Mira Hotel, Sausalito.

CSVMA Executive Secretary Charles S. Travers spoke on State Association affairs, and urged attendance at the annual meeting, June 11-13, in Los Angeles.

CSVMA President A. M. McCapes drove up from San Luis Obispo to address the meeting. Dr. McCapes cited the great growth of the association during the past 20 years. In the last six years, the veterinary population of California has doubled, he stated, and is now the second largest veterinary association in the world.

The splendid work of Executive Secretary Charles S. Travers was cited as one of the motivating forces responsible for the association's present position.

President Emmet Paul, BCVMA, greets President A. M. McCapes, CSVMA.

President McCapes also discussed the following subjects: revision of by-laws of the CSVMA; the Reorganization Committee's plans; the Medical Economics Committee report to be made in June; the demise of the Pet Health Plan in southern California; public relations efforts of the association on the rabies situation, and a suggestion that a Disaster Rehabilitation plan be considered by the association to be put into effect in the event of a major disaster.

He concluded his remarks by complimenting Mr. Travers on the excellence of the JOURNAL, and urging all local association members to become members of the state association.

Mr. W. E. Mullally, of E. R. Squibb & Sons, showed a movie on the use of ACTH.

Dr. Floyd White was chairman of the program, which was presided over by Dr. Emmet Paul, president of the BCVMA.

The following attended the meeting: Drs. A. M. McCapes, D. B. Martin, B. Turkheimer, J. Wachs, T. Harris, J. McMurray, W. E. Mottram, B. A. Hoehner, A. Newell, R. A. Burr, M. Schmidt, Jr., N. Pugatch, W. Berner, R. Graham, L. Proctor, H. Boyd, V. Paulson, R. Tompkins, W. Brimer, J. Christensen, M. Conklin, G. P. Bertetta, T. McIntyre, R. P. Cope, E. Paul, F. White, W. E. Rushworth, R. R. Crookshanks, M. Shenson, R. M. Bramman, J. K. Perry, W. J. McAllister and Charles S. Travers, W. E. Mullally, Herb Warren.

The Tulare County Veterinarians recently elected the following to office: president, Dr. Robert Dove, Porterville; vice-president, Dr. Carl T. Lambert, Visalia; secretary-treasurer, Dr. R. B. Barsaleau, Visalia.

The group has been active in bringing data related to the new Brucellosis Control program to the meetings for discussion and clarification, when needed. They have also been holding rabies vaccination clinics (in cooperation with the local Public Health Department) on a pooled vaccine basis.

Applicants

William R. Streeter, Lomita. Vouchers: Robert J. Streeter, Robert E. Harris.

Leonard L. Mortimer, Redondo Beach. Vouchers: Robert J. Streeter, Robert E. Harris.

William A. Drummond, Manhattan Beach. Vouchers: Robert E. Harris, Rollin R. Smith.

William A. Kimball, San Pedro. Vouchers: Robert J. Streeter, Robert E. Harris.

Arthur W. Lundberg, Lawndale. Vouchers: Glenn F. Azlein, Rollin R. Smith.

Mark V. McKie, Redondo Beach. Vouchers: C. Clarence Sundstrom, Robert E. Harris.

Carl Milton Foster, Torrance. Vouchers: Glenn F. Azlein, Rollin R. Smith.

Raymond R. Rediske, Novato. Vouchers: R. L. Griffith, C. J. Peetz.

Evan Stewart Hughes, Glendale. Vouchers: Reginald A. Stocking, William S. Murphy.

M. C. McSpadden, Banning. Vouchers: Jay Wallis, William G. Aldridge.

James Chris Jensen, Jr., Torrance. Vouchers: Rollin R. Smith, A. Mack Scott.

Francis W. Knoop, Santa Barbara. Vouchers: Gilbert S. Jackson, Theodore F. Taylor.

Philip A. Lee, Sacramento. Vouchers: Wendell G. Peart, Carl M. Sepponen.

Robert A. Jackson, Ontario. Vouchers: R. R. Robinson, F. E. Lichlyter.

Robert L. Chandler, Ukiah. Vouchers: R. C. Boobar, M. H. Schaffer.

Antibiotics With Prescriptions

A report by the Committee on Veterinary Supply, CSVMA

It has long been the wish and desire of the veterinary profession to place dangerous drugs on a prescription basis, since the sale of such drugs without prescriptions constitutes a danger to public health and safety. A list of such drugs would include the antibiotics, sulfas, and hormones. A partial realization of this goal was achieved when the Committee on Veterinary Supply Problems met in joint conference Tuesday, January 10th, at the Press & Union League Club, San Francisco, and those attending were: Drs. Peart, Collinson, Gaylord Cooke, Secretary, Board of Examiners, Veterinary Medicine; Ben Dean, State Public Health; Joseph Arburua, Chairman, Executive Board, AVMA; Charles Parshall, representing CSVMA to House of Representatives of AVMA; Mr. Carl Wynkoop, Deputy Attorney General; Mr. Floyd M. Heffron, Secretary, Board of Pharmacy; Mr. Huber, Legal Adviser, Cal. Medical, and Charles S. Travers.

At this meeting the Attorney General's office rendered an opinion concerning antibiotics which was to the effect that prescriptions are now required for the purchase of antibiotics. Furthermore, it is unlawful for a pharmacy to re-label drugs "For Veterinary Use Only" when such drugs are intended for human use. The enforcement of these rulings will commence as soon as the Secretary of the State Board of Pharmacy receives a legal opinion from the Attorney General's office concerning the sale of hypodermic syringes and needles, as these two items are closely related to the antibiotics. It is hoped that this opinion will be forthcoming within the next 90 days.

You may wonder what brought this all about? First and foremost, the sale of antibiotics, regardless of the label, has always been illegal in the State of California. Section 29001 of the Health and Safety Code designates antibiotics as being classified as dangerous drugs and does not exempt them from prescriptions. It does, however, in subsection (e) exempt diethyl-stilbesterol and (h) the sulfas.

Other factors that were instrumental in the realization of the enforcement of these rulings are the following:

The public is gradually becoming aware of the deception of the print on a veterinary label. Many people now know the veterinary antibiotics in injectible and capsule form are identical in purity, potency, and method of production. They are finding out the fact that the only difference between a human and veterinary antibiotic is the print on the label. In this regard, let me quote from a letter I received from a national drug manufacturer: "In the manufacture of our pharmaceutical products, our production outline calls for safety, purity, and potency tests of all products. These tests are conducted by our Quality Control Department, and the method employed is exactly the same, whether the products be for veterinary or human use.

"In regard to our antibiotics and sulfonamides, these products are prepared in large batches and these batches are used to fill human and veterinary products. One batch might be used simultaneously for filling both human and veterinary products, as the need may require.

"I would like to re-emphasize again that there is no difference between our human and veterinary antibiotics and sulfonamides, except the labeling on the package."

One can readily see that if the public were to become better acquainted with this *truth* that it would cause the Board of Pharmacy to act firmly in the enforcement of the law. It does not set well with the pharmacy profession to have a drug sold by a layman, whereas that same drug with a human label requires a degree in pharmacy, plus a license. Furthermore, the medical profession is not pleased with a situation where the public may obtain dangerous drugs without prescriptions and medicate themselves.

We feel that there will be an attempt by certain selfish interests, who have no regard for public health and safety, to amend the law in the legislature next year and exempt the antibiotics from a prescription basis. Therefore, your Executive Committee and Committee on Veterinary Supply feels that to obtain a maximum enforcement of the law it will be necessary to offset any amendment of the law in the legislature next year if presented by compiling all data possible as presented in this article, particularly with regards to sameness in potency, purity, and method of production of antibiotics, hormones, and the sulfa tablets, and the individual veterinarian should send documented, authentic cases of known treatments with veterinary drugs on humans, or purchases of veterinary drugs for human treatment, to the Committee on Veterinary Supply Problems, in care of the Executive Secretary of the CSVMA.

We wish to compile a library of facts to show the legislators why all "Dangerous Drugs" should be placed permanently on a prescription basis.

WENDELL G. PEART, D.V.M.,
Chairman, Committee on Veterinary Supply, CSVMA.

Low Cost Group Life Insurance Now Available for California Veterinarians

The Executive Committee of the California State Veterinary Medical Association at its January meeting approved the use of a group life insurance plan for its members.

The plan to be used is the direct result of our Executive Secretary Mr. Charles S. Travers' attendance at the AVMA convention in Minneapolis, August 15, 1955.

While in Minnesota, Mr. Travers learned of the Minnesota State Veterinary Medical Society's very successful group life insurance plan underwritten for members there since 1953 by the Union Central Life Insurance Company of Cincinnati, Ohio, one of America's large and sound life insurance companies. The Minnesota Society's officers are enthusiastic about their plan and have made it available to our membership in California.

We are certain that it will be to your advantage to plan to apply for this low cost group life insurance when you receive the opportunity to enroll for the plan.

Enrollment for the plan will be handled entirely by mail. You may already have received all details on how to apply for this insurance.

Briefly the group life plan includes these principal points:

1. Makes possible additional life insurance for members at low group rates.

2. It offers Group Life Insurance to members of the Association which could not be obtained by any other means.

3. Even in many larger firms, executives are not eligible for insurance to the extent made possible through this plan.

4. It adds welcome supplement to your personal insurance program.

5. It is offered on a non-medical basis and this affords additional protection for many who, because of physical impairment, could not buy life insurance at any price.

6. It provides an amount of insurance more nearly up to the needs of a professional group: $10,000 for members under 60; $3,000 for members 60 to 70.

7. The insurance will be paid to any named beneficiary, upon your death, from any cause whatsoever. The policy contains all of the settlement option privileges of a regular life insurance policy.

8. The plan is underwritten by the Union Central Life Insurance Company, one of the nation's large financial institutions.

9. This plan has no connection with accident and health insurance. *This is a Life Insurance plan exclusively.*

Premium rates for this group life insurance are very low and are outlined in the enrollment letter.

As soon as a sufficient number of our members enroll for the plan it will be placed in force for our members' benefit. It is anticipated that this initial enrollment will have been completed by June 1st. It will therefore be advantageous to enroll promptly for the plan.

No agent will solicit you for this group life insurance. The enrollment will be handled on a voluntary basis by mail. A copy of the master group life policy will be kept in the Association office in San Francisco available to our members. Individual group life certificates will be mailed to the insured members by the Union Central Life Insurance Company. Premiums will be individually billed and collected from the insurance consultant, Mr. Robert D. Davis' office in Minneapolis rather than through the Association office.

Any dividends declared on the plan by the Union Central will be paid to individual policy holders or applied to further reduce their low insurance cost.

We feel that by making available this fine group life plan the CSVMA is again demonstrating the practical value in dollars and cents of membership in our Association. For by the use of this group life insurance plan our members will be able to quickly and easily obtain a substantial amount of life insurance at the lowest possible cost without medical examination or other evidence of insurability.

Watch your mail for the enrollment information on the group life plan and enroll promptly for it.

OUT-OF-STATE NEWS

The Nevada State Veterinary Association held its annual meeting, February 10-11, at Reno, Nevada.

Twenty-five members and ten guests attended.

Speakers from California included, Dr. Reginald A. Stocking and Dr. Frank M. Brennan.

Officers elected at the meeting were: president, Dr. Murray H. Phillipson, Las Vegas; vice-president, Dr. F. N. Neville, Jr., Winnemucca, and secretary-treasurer, Dr. W. R. Sheff.

The Central Arizona VMA elected the following to office: President, Dr. A. Raimonde of Mesa; vice-president, Dr. K. Maddy of Phoenix; secretary-treasurer, Dr. E. Powell of Scottsdale, and member-at-large, Dr. J. Carney of Chandler.

OPPORTUNITIES

For Sale

Profex X-Ray, shock-proof. Purchased 1952, only slightly used. Not portable. Complete with two 8x10 hangers; one 8x10 screen; two 14x17 hangers; one 14x17 screen; two tanks; Fluorscope. Cost $1,500, will sell for $700. Has table top; ideal for veterinary hospital. Dr. P. F. Dieffenbacher, care of Standard Oil Hospital, Richmond, California.

* * *

Used Incubator—metal interior, exterior. Precision Scientific Company, $70. Fresno Veterinary Hospital, 1212 Belmont, Fresno.

* * *

For Rent or Lease

Pet Hospital in San Fernando Valley. Fine opportunity for one-man operation. Reasonable rent. Dr. Bee, General Delivery, Santa Ana, Calif.

* * *

Veterinarian Available

Married veteran of World War II graduating from AVMA approved school in May desires employment in either general practice or small animal hospital in California. Box A-37, THE CALIFORNIA VETERINARIAN.

* * *

For Sale

California Small Animal Hospital in select area, drawing clientele from Hollywood and Beverly Hills. Modern buildings and real estate, including living quarters. Completely equipped; X-ray, instruments, refrig., grooming, etc. 100 animal capacity, 30 outside runs. $15,000 down. Terms. Owner retiring. Write Box A-38, THE CALIFORNIA VETERINARIAN.

Importance of Disease Control

(Continued from page 17)

amination by Federal meat inspectors in slaughterhouses. By studying the history of each infected animal, we try to find out in what herd it became infected. Then we have to trace backward and forward—backward to find the original herd from which the infection came, and forward to locate other infected animals that may have been removed from the original herd. A large number of our infected animals are being tracked down in this way.

Another cattle disease of concern is brucellosis. For years the fight against brucellosis has centered on blood testing of animals, slaughter or quarantine of those diseased, and vaccination of calves. Vaccination of calves with strain 19 vaccine has played an important role in protecting young stock. The new interpretation in reading results of blood agglutination tests to make allowances for normal reactions of animals that had been vaccinated and are over 30 months of age will clear up a lot of confusion that formerly existed. It will remove one of the drawbacks to vaccination and still provide adequate protection against the disease. Under the eradication program, the incidence of brucellosis in dairy and beef cattle tested has dropped from 11.5 per cent in 1934 to 2.6 per cent in 1954. Approximately 10 years ago, when the infection rate was five per cent, it was estimated that the annual loss to the dairy industry alone amounted to $87 million, and a total loss of $100 million to the livestock industry as a whole. As the infection rate gradually declined, recent estimates on the losses caused by brucellosis were $58 million a year. This reduction in losses is more than the total of State-Federal expenditures, even with the expanded program, which was inaugurated by Secretary Benson on October 8, 1954, in an effort to reduce the level of infection and approach complete eradication as rapidly as possible.

Controlled Trials for Furazolidone

The first strictly controlled trials to assess the value of furazolidone (Furoxone, Eaton) in naturally occurring outbreaks of fowl typhoid (Salmonella gallinarum) on English poultry farms are described in *Veterinary Record*, 67:799 (Oct. 22) 1955.

Pointing out that fowl typhoid has been the cause of severe losses in many English poultry flocks, the authors, J. F. Harbourne and K. C. Sellers, note that previous work by H. Williams Smith had shown the effectiveness of furazolidone in chickens experimentally infected with Salmonella gallinarum. For the purposes of their own study, the authors selected fifteen farms on which fowl typhoid had been diagnosed. On these farms the owners agreed to divide their flocks; some birds were to be fed mash mixed with .02 or .04 per cent furazolidone; others were to be treated with exactly the same care except that their mash was to be unmedicated.

At the close of the treatment period, comparison of the mortality rates of the two groups led the investigators to conclude "furazolidone had a significant effect on the mortality rate due to fowl typhoid, reducing it by more than half."

"To reduce losses to a minimum," they state that "it is essential to commence treatment in the early stages of the outbreak and, if there is a recrudescence of the disease, to repeat treatment."

Proposed Changes in Constitution and By-Laws, CSVMA

The Committee on Ways and Means presented a new draft of the Constitution and By-Laws which will be voted on by the members at the Business Meeting to be held June 11, 1956, at the Statler Hotel, Los Angeles.

CONSTITUTION

ARTICLE I

Name

This association shall be incorporated and known as the California Veterinary Medical Association and shall remain a nonprofit organization in fact.

ARTICLE II

Objectives

The purpose of this association shall be to promote veterinary science; to propagate a fraternal feeling among its members; to protect the rights and privileges of veterinarians; and to elevate the standards of the profession generally in scientific intercourse.

ARTICLE III

Officers

Section 1. The elective officers of this association shall be a president, president-elect, first vice-president, second vice-president, third vice-president and treasurer. The president-elect shall be installed as president at the termination of the annual session next following the one at which he was elected. Each elective officer shall hold office for one year following his installation at the annual meeting or until his successor has been installed.

Section 2. There shall be an executive secretary employed by the Executive Committee or elected by the association. In either event, he shall have no voting power in the Executive Committee.

Section 3. A delegate and an alternate to the House of Representatives of the American Veterinary Medical Association shall be elected in conformity with the provisions of the Constitution and By-laws of the American Veterinary Medical Association.

Section 4. The elective officers and the immediate past president shall constitute the Executive Committee.

Section 5. The Board of Governors shall consist of the president, president-elect, and immediate past president.

Section 6. The elective officers shall be known as the corporate officials of the association and shall be charged with the duty of complying with the United States and California laws governing corporations.

ARTICLE IV

The duties of officers, requisites of membership, times and places of meetings, and such other regulations as may be necessary for the government of this association shall be provided for in the By-laws.

ARTICLE V

Amendments

All proposals for alteration of the Constitution shall be presented in writing. Alterations proposed shall not be acted upon until referred to the Executive Committee and presented anew by them to the association. No change in the Constitution shall be acted upon unless the members are notified of such changes in writing, or the proposed changes be published in THE CALIFORNIA VETERINARIAN at least ten days previous to any action thereon. A two-thirds vote of members present shall be required for such alteration.

BY-LAWS

ARTICLE I

Meetings

Section 1. The annual meeting shall be held at such time and place as decided upon by the Executive Committee or by vote of the association; such selection to be made at least one year in advance. Other meetings of the association may be held at such times and places as may be decided upon by the Executive Committee or by vote of the association.

Section 2. Special meetings shall be called by the president, or in his absence by the president-elect, upon written request of seventy-five members in good standing, specifying the particular object of such meeting. The president, if he deems it necessary, may call special meetings. All members in good standing shall be given not less than fifteen days' notice of all special meetings.

ARTICLE II

Quorum

Seventy-five members in good standing shall constitute a quorum for the transaction of business of the association.

ARTICLE III

Order of Business

1. Roll call.
2. Reading of minutes.
3. Annual report of executive secretary.
4. Annual report of treasurer.
5. Unfinished business.
6. New business.
7. Admission of new members.
8. Reports of committees.
9. Election of officers.
10. Installation of officers.
11. Adjournment.

ARTICLE IV

Duties of the President

Section 1. It shall be the duty of the president to preside at all meetings and preserve order and decorum.

Section 2. The president shall appoint a sergeant-at-arms, committees as authorized in articles XIII and XIV of the By-laws, and such other committees as may be necessary.

Section 3. The president shall fill unexpired terms of any vacated, nonelective officers, and treasurer. Such appointments must have the approval of a majority of the Executive Committee.

Section 4. The president shall be a member of the Executive Committee and Board of Governors with the same franchise as other members.

Section 5. The president shall call special meetings of the Executive Committee whenever he may deem it necessary.

ARTICLE V

Duties of President-Elect

Section 1. It shall be the duty of the president-elect to perform the duties of the president in case of the latter's absence or inability to serve or conduct the affairs of the association, except as provided in section 3 of article IV. He shall otherwise assist the president as the president may from time to time determine.

Section 2. (a) The president-elect shall act as chairman of the Executive Committee and Board of Governors.

(b) It shall be the duty of the president-elect to notify all members of the Executive Committee and/or the Board of Governors at least three days in advance of the time and place of any meeting of such Committee or Board.

ARTICLE VI

Duties of First Vice-President

It shall be the duty of the first vice-president to perform the duties of the president and/or presi-

dent-elect in the event of their absence or inability to serve or conduct the affairs of the association, except as provided in section 3 of article IV. He shall also be chairman of the Committee on Public Relations.

ARTICLE VII

Duties of the Second Vice-President

It shall be the duty of the second vice-president to perform the duties of the president and/or president-elect and first vice-president in their absence or inability to serve, except as provided in section 3 of article IV. He shall also be chairman of the Committee on Program.

ARTICLE VIII

Duties of the Third Vice-President

It shall be the duty of the third vice-president to perform the duties of the president and/or president-elect, first vice-president and second vice-president in their absence, except as provided in section 3 of article IV. He shall also be chairman of the Committee on Membership and American Veterinary Medical Association Affairs.

ARTICLE IX

Duties of the Treasurer

Section 1. It shall be the duty of the treasurer to put all moneys of the association into a fund to be known as the general fund, to be appropriated for the payment of current expenses and for such other purposes as the Executive Committee may direct.

Section 2. All moneys shall be deposited in a bank in the name of the California Veterinary Medical Association.

Section 3. It shall be the duty of the treasurer to keep a record of all bonds and other securities and policies of the association and deposit such bonds, securities and policies in a safety deposit box of the association.

Section 4. The treasurer shall sign all checks drawn on the general fund, or in the event of his inability to do so, one member of the Executive Committee shall sign. Said checks shall also be co-signed by the executive secretary, or in the event of his inability, by the assistant executive secretary.

Section 5. There shall be a fund designated as the Operating Fund to be handled by the executive secretary to pay the current running expenses of the association. This fund shall be drawn on the General Fund. Amount of this fund shall be determined by the Executive Committee from time to time.

Section 6. The treasurer shall be bonded with a reputable company in the amount of $10,000. The premium of such bond shall be paid by the association.

Section 7. At each annual meeting, or at such other times as may be authorized by the Executive Committee, the treasurer shall render, to the association, a detailed, written report of his receipts and disbursements or, in his absence, submit a statement for presentation.

ARTICLE X

Duties of the Executive Committee

Section 1. The Executive Committee shall meet prior to all meetings of the association and shall hold such other meetings as may be necessary for the proper conduct of the business of the association. It shall be the duty of each committee member to be present at such meetings.

Section 2. Five members of the Executive Committee shall constitute a quorum for the transaction of business.

Section 3. The Executive Committee shall select the date and place for the annual meeting of the association unless the date and place have been selected by the association.

Section 4. (a) It shall be the duty of the Executive Committee to examine applications for membership and make recommendations to the association, as provided in section 3 of article XVI, unless applications are printed in THE CALIFORNIA VETERINARIAN.

(b) The Executive Committee shall have the power to authorize reclassification of members as to membership status (as pertains to payment of dues). However, no change of classification shall be permitted until the end of the current year. Members so reclassified shall be notified by the executive secretary of the Executive Committee action.

Section 5. The Executive Committee shall receive from the executive secretary, at their annual meeting, a proposed budget covering all anticipated expenditures of the association for the following fiscal year. It shall be the duty of the Executive Committee to study, make such changes as are deemed necessary, and approve the budget in its final form.

Section 6. (a) The Executive Committee shall have the power to hear and determine upon all complaints, filed before it in writing, relative to improper conduct of any member of the association and shall, if it deems it advisable, summon the member so charged to appear before it to answer such written charges and make defense.

(b) If the Committee after fair and impartial trial finds the defendant guilty of all or part of the offenses as charged, said committee shall report to the association, at regular session, a summary of its findings with its recommendations. No public report of such hearings shall be divulged by any member of the Executive Committee previous to its report or recommendation to the association in regular session.

(c) The membership of the defendant shall be declared void if two-thirds of the members present at a regular session vote for his dismissal from the association. Such vote shall be by ballot only.

Section 7. The Executive Committee shall provide proper headquarters for the association.

Section 8. (a) The Executive Committee shall be vested with the authority to select, enter into contract, and employ the executive secretary.

(b) The Executive Committee shall not enter into contract with an executive secretary for a period exceeding one year.

(c) The Executive Committee shall be vested with the authority to discharge the executive secretary if a breach of contract on his part is determined.

(d) The Executive Committee shall establish the salary and expenses of the executive secretary.

(e) The Executive Committee shall dictate the policy and duties of the executive secretary, except as otherwise provided in article XII.

Section 9. The Executive Committee shall have complete charge of the property and financial affairs of the association, including the management of all its publications.

Section 10. The Executive Committee shall have the accounts of all officers in charge of funds and property of the association audited by a qualified accountant annually or at such other times as it shall direct. The audit report shall be submitted to the association, at a regular session, after consideration by the Executive Committee.

Section 11. The Executive Committee shall report, at the annual meeting of the association, their actions which shall also include the actions of the Board of Governors.

ARTICLE XI

Duties of the Board of Governors

The Board of Governors shall perform emergency duties of the Executive Committee when the latter is not in session, except as provided in section 6, section 7, and section 9 of article X and report their action to the Executive Committee for approval.

ARTICLE XII

Duties of the Executive Secretary

Section 1. The duties of the executive secretary shall be such as are delegated by the Executive Committee or association, in regular session, and shall be such duties as are normally executed by such an office or as specifically provided for by the various provisions of this article (XII).

Section 2. The executive secretary shall attend all meetings of the association and the Executive Committee and shall keep and present all minutes of their respective proceedings.

Section 3. The executive secretary shall be custodian of all records, books, papers, and other properties of the association except those delegated to the treasurer. All bonds and other securities and policies shall be deposited in the association's safety deposit box.

Section 4. The executive secretary shall submit a budget to the Executive Committee, during their annual meeting, for approval.

(1) The budget shall be for the following fiscal year.

(2) Fiscal year shall be from the termination of one annual meeting to the termination of the next annual meeting.

(3) The budget shall contain the following: rentals; salaries of employees; printing, paper, and postage for office and publications; traveling expenses; and other expenditures which are anticipated.

Section 5. The executive secretary shall conduct official correspondence under the name of the association. He shall, at least ten days in advance unless otherwise provided for in the By-laws, notify all members of meetings. He shall notify officers of their elections, committees of their appointments, and their duties as provided in the Constitution and By-laws and by the president. Such notices shall be in writing or in official publications of the association.

Section 6. The executive secretary shall, with the approval of the Executive Committee, arrange for necessary accommodations for holding annual conventions.

Section 7. The executive secretary shall provide for the registration of members and visitors at all meetings.

Section 8. The executive secretary shall receive all funds paid to the association, promptly transfer such funds to the treasurer of the association and receive from the treasurer a receipt therefor. Disbursements shall be handled as provided in section 11 of this article (XII).

Section 9. The executive secretary shall review and countersign all contracts, agreements, transfers, or other instruments to which the association is a party when so authorized by the association or Executive Committee.

Section 10. The executive secretary shall carefully examine, approve or reject, by direction of the Executive Committee, all material intended as advertising or otherwise in any publication or bulletin of the association. He shall, with Executive Committee's approval, execute written contracts relating to advertising in a form so authorized by the Executive Committee.

Section 11. The executive secretary shall retain a sum provided by the Executive Committee as an Operating Fund as provided in Article IX, Section 5. He shall sign and issue checks or drafts drawn upon this fund.

Section 12. The executive secretary shall employ and/or dispense with such assistants as may be ordered by the Executive Committee. The Executive Committee shall outline the scope and duties of such special employees acting under the direction of the executive secretary.

Section 13. The executive secretary shall give bond in such sum as may be fixed by the Executive Committee. The premium on such bond shall be paid by the association.

Section 14. The executive secretary shall, at annual meetings or as otherwise requested by the Executive Committee, render a report of his activities and the state of the association funds in his hands. This report shall be submitted to the Executive Committee for examination prior to the business meeting of the association.

ARTICLE XIII

Duties of the Sergeant at Arms

The sergeant at arms shall admit only members to the business sessions of the association, and such sessions as the Executive Committee may direct, by the member displaying his registration badge.

ARTICLE XIV

Standing Committees

Section 1. In addition to the Executive Committee, there shall be five standing committees of the association.

Section 2. Committee on Program—This committee shall be composed of five members. The second vice-president shall be the chairman. The remaining four members shall be appointed by the president.

Section 3. Committee on Legislation—This committee shall be composed of six members. Each member shall serve for a term of three years. Two members shall be appointed by the president each year to obtain continuity.

Section 4. Committee on Membership and American Veterinary Medical Association Affairs—This committee shall be composed of the third vice-president, who shall be chairman, and the secretaries of the local associations.

Section 5. Committee on Public Relations—This committee shall be composed of six or more members. The first vice-president shall be chairman, the executive secretary shall serve as secretary, and the remaining members shall be appointed by the president, representative of the different sections of the state.

Section 6. Committee on Way and Means—This committee shall be composed of six members, and each member shall serve for a term of three years. Two members shall be appointed by the president each year to obtain continuity.

ARTICLE XV

Duties of Standing Committees

Section 1. It shall be the duty of the Committee on Program to arrange for the presentation of papers, lectures, and demonstrations at the annual meeting. It shall also be the duty of this committee to cooperate with other agencies in arranging programs for the annual veterinary conferences.

Section 2. It shall be the duty of the Committee on Legislation to propose and secure such new legislation as the association directs and to defend the Practice Act when changes which are detrimental to the veterinary profession or livestock owners are desired from outside sources.

Section 3. (a) It shall be the duty of the Committee on Membership and American Veterinary Medical Association Affairs to work with the American Veterinary Medical Association and the resident state secretary and to report on matters of interest to the association.

(b) It shall be the duty of the Committee on Membership and American Veterinary Medical Association Affairs to work with the executive secretary and assist him in obtaining new members and reinstatement of lapsed members.

(c) It shall be the duty of the Committee on Membership and American Veterinary Medical Association Affairs to cooperate with the American Veterinary Medical Association on all matters pertaining to ethics.

(d) It shall be the duty of the Committee on Membership and American Veterinary Medical Association Affairs to assist the sergeant-at-arms in fulfilling his duties.

Section 4. It shall be the duty of the Committee on Public Relations to study the relations of the veterinary profession to agriculture and other branches of science and industry and to carry out educational programs beneficial to the general welfare of mankind through the medium of scientific and public press, civic clubs, professional groups, motion pictures, radio and television.

Section 5. It shall be the duty of the Committee on Ways and Means to recommend proposed amendments to the Constitution; ways and methods of raising funds, and making changes beneficial to the association.

ARTICLE XVI

Candidates for Membership

Section 1. (a) Applicants must be of good moral character and possess reputable professional standards.

(b) Applicants must be graduates of a college of veterinary medicine which has been approved by the American Veterinary Medical Association.

Section 2. All applications for membership shall be submitted on a form approved by the Executive Committee and provided by the association. Applicants shall be duly vouched for by two members in good standing. Applications shall be accompanied by dues.

Section 3. All applications for membership must be presented or mailed to the executive secretary for filing. It shall be the duty of the executive secretary to publish the names of such applicants in the official publication of the association or, in the absence of such a publication, he shall send a letter to each member in good standing in the association setting forth the name or names of the applicant or applicants proposed for membership. If no written objections are received by the executive secretary within thirty days after notification, as provided above, the applicant or applicants shall automatically become members of the association.

If an objection to any applicant is received in writing by the executive secretary, the application shall then be referred to the Executive Committee at the next regular or adjourned meeting of the association for consideration and recommendation to the association at the regular or adjourned meeting. The applicant shall become a member if two-thirds of the members present at the regular or adjourned meeting vote by ballot in favor of accepting the applicant.

ARTICLE XVII

Membership and Dues

Section 1. Active membership shall comprise the following classifications.

(1) Members employed full-time by the United States Government, State of California, any County of California, and City of California, or in teaching or research, and not in any way engaged in private practice, shall pay annual dues of $12.50.

(2) All other members (not provided for under subsection (1), section 1 of article XVII) shall pay annual dues of $25.00.

(3) In order that the dues shall run from January first of each year, the following amount shall be remitted with each application filed during a given month:

Month	Full-time employees of United States Government, State of California, County of California, City of California, Teaching or Research	All Other
January	$12.50	$25.00
February	11.46	22.92
March	10.42	20.83
April	9.38	18.75
May	8.34	16.67
June	7.29	14.58
July	6.25	12.50
August	5.21	10.42
September	4.17	8.33
October	3.13	6.25
November	2.09	4.17
December	1.05	2.09

Section 2. Junior members are those who qualify under section 1 of article XVI and shall comprise graduates who joined the association within one year of graduation. They shall remain junior members for one year only and must then become active members, as provided in section 1 of this article (XVII). They shall have all the privileges of active members. The dues of junior members shall be $5.00 per year.

Section 3. Nonresident members are those who qualify under section 1 of article XVI and reside or practice entirely outside the territorial limits of the State of California. They shall have all the rights and privileges of the association. The annual dues shall be $5.00.

Section 4. Retired members who qualify under section 1 of article XVI shall comprise those who have entirely ceased to practice veterinary medicine in any form whatsoever. They shall have all the rights and privileges of active members. The annual dues of retired members shall be $5.00.

Section 5. Life members who qualify under section 1 of article XVI shall be those who have been exempted from paying dues by vote of the association. They have all the rights and privileges of active members. Proposals for life membership must be referred to the Executive Committee for recommendation and can only be so elected by vote of the association.

Section 6. (a) Honorary members shall comprise men or women who have distinguished themselves in veterinary medicine or other sciences. Proposals for honorary membership must be made in writing by members of the association, giving the qualifications of the candidate, and shall be referred to the Executive Committee for consideration and recommendation before they can be voted upon by the association. A two-thirds vote by ballot of the members present shall be required for election to honorary membership.

(b) Honorary members shall be exempt from all dues and have the rights and privileges of active members except the right to vote and hold office.

Section 7. Only members who have paid current dues or are in arrears in dues not more than five months shall have the right to vote and be entitled to all the rights and privileges of the association.

ARTICLE XVIII

Memberships—Arrears, Reinstatements and Dismissals

Section 1. All members six months in arrears, after due notice, shall be automatically dropped from the rolls by the executive secretary. Their names shall, however, be included in the annual report of the executive secretary. The names of such members dropped from the rolls shall be referred to the Committee on Membership and American Veterinary Medical Association Affairs for investigation and possible reinstatement.

Section 2. All persons subject to the provisions of section 1 of this article (XVIII), may be reinstated within the year upon written application for reinstatement, when the application is accompanied by the payment of current dues, provided such application is considered favorably by the Executive Committee.

Section 3. Violation of the code of ethics, conviction of a felony by a court of law, and activities prejudicial to the welfare of the veterinary profession shall constitute ground for dismissal from the membership of the association. The charges shall be filed with the executive secretary in writing and copies of them shall be furnished to the defendant together with notification to appear before the Executive Committee at a stated time and place.

ARTICLE XIX

Nomination, Election and Installation of Officers

Nomination of officers shall take place at a meeting other than the Annual meeting and one which is held at least 90 and not more than 180 days prior to the Annual meeting. The slate of nominees will be printed on a ballot which will be mailed to the members in good standing 30 days prior to the date of the Annual meeting. The ballots shall then be marked and mailed to the executive secretary's office and shall be counted by tellers appointed by the president. Installation of officers shall take place at the Annual meeting of the association.

ARTICLE XX

Suspension of By-laws

Section 1. The By-laws may be temporarily suspended, for the purpose of changing the order of business, by a two-thirds vote of the members present.

Section 2. The By-laws may be temporarily suspended, for the purpose of facilitating important business of the association, by a two-thirds vote of members present. Such suspension of the By-laws, however, must be of such nature that it does not interfere with the vested rights of any member.

ARTICLE XXI

Amendments

All proposals for alteration of the By-laws shall be presented in writing. Alterations proposed shall not be acted upon until referred to the Executive Committee and presented anew by them to the association. No change in the By-laws shall be acted upon unless the members are notified of such changes in writing or by printing in THE CALIFORNIA VETERINARIAN at least ten days previous to any action thereon. A two-thirds vote of members present shall be required for such alteration.

ARTICLE XXII

Code of Ethics

The Code of Ethics shall be the same as the American Veterinary Medical Association, substituting the name "California Veterinary Medical Association" for the name "American Veterinary Medical Association" wherever it appears in that Code.

NOTE: *The AVMA Code of Ethics, referred to above, will be published in* THE CALIFORNIA VETERINARIAN *in a forthcoming issue.*

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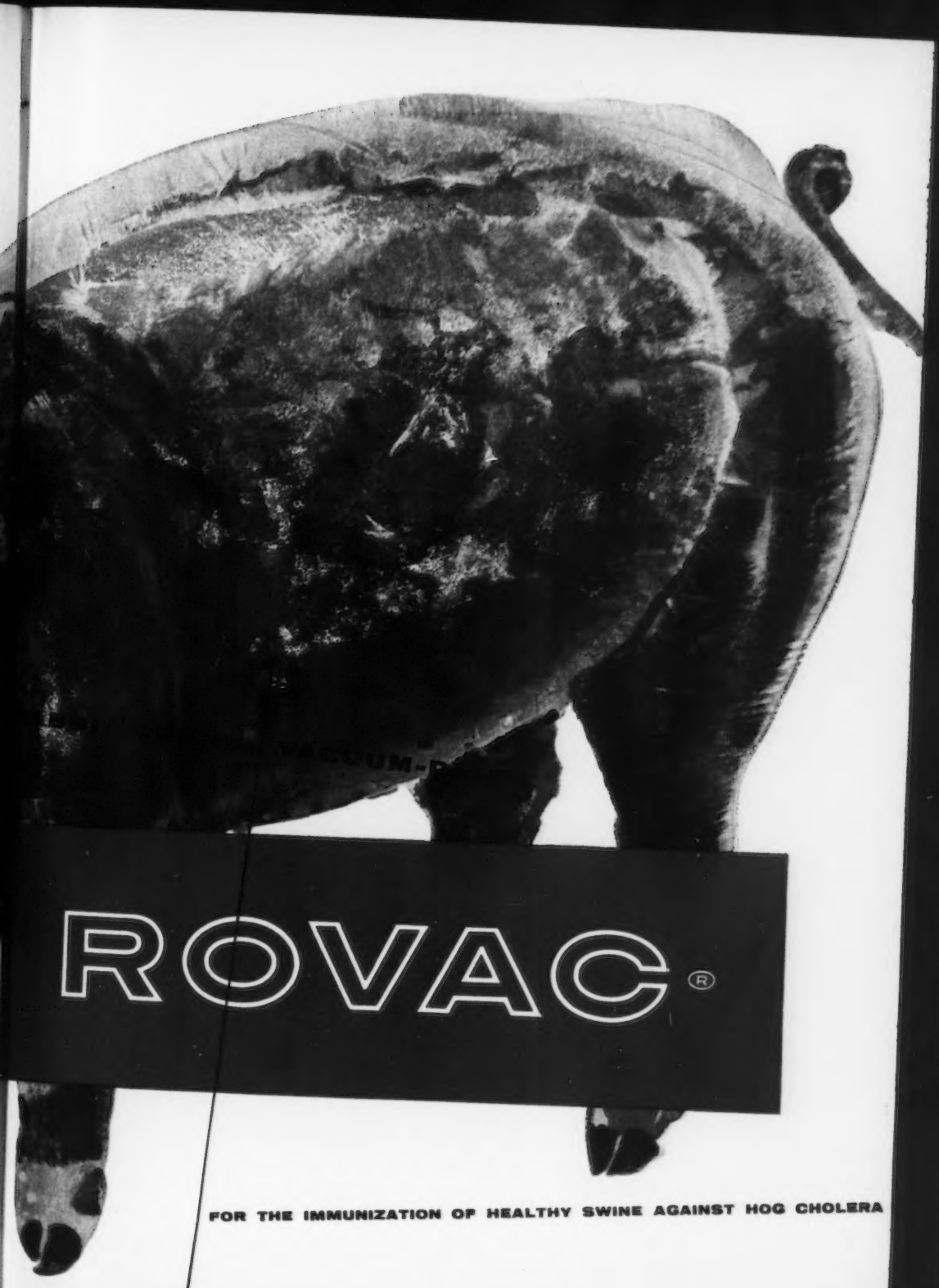

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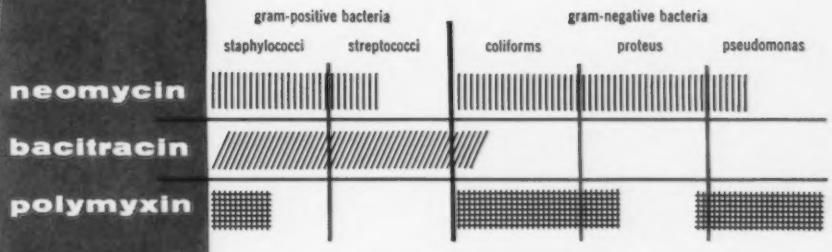

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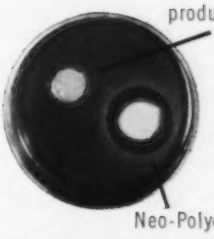

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